REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-20 are presently active in this case.

In the outstanding Office Action, Claims 1-2, 7, 11-12 and 17 were rejected under 35 USC §102(b) as being anticipated by Suzuki (U.S. Patent No. 6,044,106), and Claims 3-6, 8-10, 13-16 and 18-20 were objected to as being dependent upon a rejected base claim, but otherwise allowable if rewritten in independent.

Applicants acknowledge with appreciation the indication of allowable subject matter. However, since Applicants consider that the original claims each patentably define over the cited art, for the reasons as discussed below, Claims 3-6, 8-10, 13-16 and 18-20 have presently been maintained in original form.

Applicants respectfully traverse the rejection of Claims 1–2, 7, 11–12 and 17 as anticipated by Suzuki, because Suzuki is not believed to teach each feature stated in the rejected claims.

In particular, as recited in pending Claim 1, the claimed OFDM transmit signal receiver comprises a demodulation circuit and a differential detection circuit. The demodulation circuit converts an information carrier, an additive-information transmission carrier and a reception-synchronization pilot signal into frequency-axial data. The additive-information transmission carrier and the reception-synchronization pilot signal have a lower multi-valued modulation degree than the information carrier. To perform detection, the differential detection circuit uses a detection-subject symbol of a plurality of symbols indicated at a predetermined interval in the same frequency range and uses a symbol ahead the detection-subject symbol by a predetermined time in at least either one output of the

additive-information transmission carrier and the reception-synchronization pilot signal output from the demodulation circuit.

In contrast, according to Suzuki, reception data digitized by an analog-to-digital converter 20 are multiplied with a time waveform, and multicarrier signals are converted into data of symbol series by the FET circuit 134. The reception data of symbol series are supplied to a differential demodulating circuit 410, in which a multiplier 411 multiplies the data of the reception symbol series with the preceding reception data delayed by a delay circuit 412 by one symbol amount, whereby differential demodulation is carried out.[1] Further, an arrangement for detecting noise power is provided with a symbol determination circuit 431 which determines symbols demodulated by the differential demodulating circuit 410. Data of symbol series determined by the symbol determination circuit 431 is supplied to a differential modulation circuit 432.[2]

The outstanding Official Action finds that the differential demodulation circuit 410 of Suzuki corresponds to the demodulation circuit recited in pending Claim 1, and that the symbol determination circuit 431 of Suzuki corresponds to the differential detection circuit recited in pending Claim 1. Applicants respectfully dispute such findings as being in error.

Indeed, the claimed demodulation of Claim 1 converts an information carrier, an additive-information transmission carrier and a reception-synchronization pilot signal into frequency-axial data, and the claimed differential detection circuit of Claim 1 conducts detection with respect to the additive-information transmission carrier or the reception-synchronization pilot signal output from the demodulation circuit. In contrast, the differential demodulation circuit 410 of Suzuki carries out differential demodulation of the reception data of symbol series, as mentioned above. However, Suzuki does not disclose that the reception data of symbol series includes an additive-information transmission carrier or a reception-

[1] Suzuki, column 13, lines 2–30.
[2] Id., column 13, lines 36–45.

synchronization pilot signal, nor does the Suzuki differential demodulation circuit 410 carry out differential demodulation of the additive-information transmission carrier and the reception-synchronization pilot signal.

In addition, the Suzuki symbol determination circuit 431 determines symbols demodulated by the differential demodulation circuit 410, and data of symbol series determined by the symbol determination circuit 431 are supplied to the differential modulation circuit 432. Therefore, the Suzuki symbol determination circuit 431 is different from the differential detection circuit of pending Claim 1 which conducts detection with respect to the additive-information transmission carrier or the reception-synchronization pilot signal.

Moreover, by using the demodulation circuit and the differential detection circuit of the OFDM transmit signal receiver according to Claim 1, it is possible to obtain a detection output from the additive-information transmission carrier or reception-synchronization pilot signal having a lower multi-valued modulation degree than the information signal. Therefore, the OFDM transmit signal receiver of Claim 1 has the advantage that a S/N ratio can be detected even in a bad reception condition where the additive-information transmission carrier or reception-synchronization pilot signal can be received but the information signal cannot be received. This advantage is neither taught nor achieved by the system of Suzuki. In view of these distinctions, it is respectfully submitted that the pending claims patentably define over Suzuki, and that the outstanding rejection on the merits has been overcome.

Consequently, in view of the above comments, no further issues are believed to be

outstanding, and the present application is believed to be in condition for formal allowance.

An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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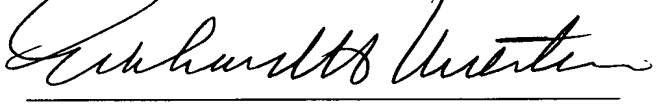

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